

```

1. #include <stdio.h>
2. #include <stdlib.h>
3.
4. //Structure FILM
5. typedef struct
6. {
7.     unsigned int number;
8.     char name[25];
9.     char director[25];
10.    char country[25];
11.    char profit[25];
12. }FILM;
13.
14. void input_data(FILM* film); //function to write data into a structure
15. void output_data(FILM film); //to show data from a structure
16. void add_film(FILM* film_from, FILM* film_to, int fromsize, unsigned int num, FILM add);//to
    add human after number
17.
18. int main()
19. {
20.     FILE *fin;
21.     FILM a;
22.     FILM b;
23.     FILM array[5];
24.     FILM add;
25.     char A;
26.     //int count = 0;
27.     //opening a file for writing
28.     if ((fin = fopen("data.txt", "rb")) == NULL)
29.     {
30.         if ((fin = fopen("data.txt", "wb")) == NULL)
31.         {
32.             perror("Can't open a file");
33.             exit(0);
34.         }
35.         //writting info about each film
36.         for (int i = 0; i < 5; i++)
37.         {
38.             printf("Write info about film %i:\n", i + 1);
39.             input_data(&a);
40.
41.             fwrite(&a, sizeof(a), 1, fin);
42.             fclose(fin);
43.             fin = fopen("data.txt", "ab");
44.         }
45.     }
46.     else
47.     {
48.         printf("File already exists. Do you want to rewrite it? (y, n)");
49.         A = getchar();

```

```

50.     if ((A == 'y') || A == 'Y')
51.     {
52.         fclose(fin);
53.         if ((fin = fopen("data.txt", "wb")) == NULL)
54.         {
55.             perror("Can't open a file");
56.             exit(0);
57.         }
58.         //writting info about each film
59.         for (int i = 0; i < 5; i++)
60.         {
61.             printf("Write info about film %i:\n", i + 1);
62.             input_data(&a);
63.
64.             fwrite(&a, sizeof(a), 1, fin);
65.         }
66.     }
67.     else if ((A == 'n') || (A == 'N'))
68.     {
69.         int l = 0;
70.         printf("Data that already exists in file:\n");
71.         while (!feof(fin))
72.         {
73.             fread(&a, sizeof(FILM), 1, fin);
74.             if (feof(fin))
75.                 break;
76.             printf("Info about film %i:\n", l + 1);
77.             output_data(a);
78.             l++;
79.         }
80.
81.         if (l == 0)
82.             printf("FILE IS EMPTY!\n");
83.
84.         fclose(fin);
85.         fin = fopen("data.txt", "ab");
86.
87.         printf("More data:\n");
88.         for (; l < 5; l++)
89.         {
90.             printf("Write info about film %i:\n", l + 1);
91.             input_data(&b);
92.
93.             fwrite(&b, sizeof(b), 1, fin);
94.         }
95.     }
96. }
97.
98.
99. fclose(fin); //closing a file

```

```

100.
101.     unsigned int add_num;
102.
103.     if ((fin = fopen("data.txt", "rb")) == NULL) //opening a file for reading
104.     {
105.         perror("Can't open a file");
106.         exit(0);
107.     }
108.
109.     //reading info about films from file
110.     int delc = 0;
111.     for (int i = 0; i < 5; i++)
112.         fread(&array[i], sizeof(FILM), 1, fin);
113.
114.     fclose(fin);
115.
116.     printf("\nYour data:\n\n"); //printing data from a file
117.     for (int i = 0; i < 5; i++)
118.     {
119.         printf("Info about film %i:\n", i + 1);
120.         output_data(array[i]);
121.     }
122.
123.     //DELETING
124.
125.     printf("\n\nInfo after deleting:\n");
126.     if (size == 0)
127.         printf("EMPTY LIST!\n");
128.     for (int i = 0; i < size; i++)
129.     {
130.         printf("Info about film %i:\n", i + 1);
131.         output_data(array_newd[i]);
132.         array_newd[i].number = i + 1;
133.     }
134.
135.     printf("Number, after which you want to add new film: ");
136.     scanf("%i", &add_num);
137.
138.     printf("Info about film you want to add:\n");
139.     input_data(&add);
140.
141.     add_human(array_newd, array_newa, size, add_num, add); //adding human
142.
143.     if ((fin = fopen("data.txt", "wb")) == NULL) //opening file for writing
144.     {
145.         perror("Can't open a file");
146.         exit(0);
147.     }
148.
149.     //writing a final info to a file

```

```

150.     for (int i = 0; i < size + 1; i++)
151.         fwrite(&array_newa[i], sizeof(add), 1, fin);
152.
153.     fclose(fin);
154.
155.     //printing an info
156.     printf("\nFinal info:\n");
157.     for (int i = 0; i < size + 1; i++)
158.     {
159.         printf("Info about film %i:\n", i + 1);
160.         output_data(array_newa[i]);
161.     }
162.
163.     return 0;
164. }
165.
166. void input_data(FILM* film)
167. {
168.     printf("Film name: ");
169.     scanf("%s", film->name);
170.     printf("Film director: ");
171.     scanf("%s", film->director);
172.     printf("Film country: ");
173.     scanf("%s", film->country);
174.     printf("Film profit: ");
175.     scanf("%s", film->profit);
176. }
177.
178. void output_data(FILM film)
179. {
180.     printf("Film name: %s\n", film.name);
181.     printf("Film director: %s\n", film.director);
182.     printf("Film country: %s\n", film.country);
183.     printf("Film profit: %s\n", film.profit);
184. }
185.
186. void add_film(FILM* film_from, FILM* film_to, int fromsize, unsigned int num, FILM add)
187. {
188.     if (fromsize == 0)
189.         film_to[0] = add;
190.     else
191.         for (int i = 0, k = 0; i < fromsize; i++)
192.         {
193.             film_to[k++] = film_from[i];
194.             if (film_from[i].number == num)
195.                 film_to[k++] = add;
196.         }
197. }

```